

Supports and Barriers in the Transfer of Community College Courses to Teacher Education Programs in Iowa

**A Report to the Iowa Teacher Quality Enhancement Grant's
Cross-Articulation Team**

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Introduction

As states and districts struggle to meet the demand for high quality teachers, there are growing calls to expand the role of community colleges in preparing new teachers (Schuhmann, 2002; Lee-Bayha and Villegas, 2003; Parsons, 2003). Policymakers have suggested that community colleges are well suited to address teacher shortages and contribute to a more diverse teacher workforce (Coulter & Vandal, 2007). As a result, community colleges have assumed a more active role in teacher education through partnerships with four-year institutions and the creation of an Associate of Arts in Teaching degree that transfers to a teacher education program (Shkodriani, 2004).

Iowa is uniquely situated to engage community colleges in teacher preparation because of its existing efforts to improve the transfer of courses between two- and four-year institutions. The state developed articulation agreements¹ that allow community college students to transfer an Associate of Arts (A.A.) degree to meet general education requirements at the three Regent universities. Community colleges in Iowa developed a common course-numbering system to further support the transfer of courses. In addition, the Regent universities have developed online tools that allow community college students to plan out which courses will transfer.

The state is addressing the role of community colleges in teacher education as part of its Teacher Quality Enhancement (TQE) grant. The TQE grant is designed to strengthen teacher education through reforms that hold teacher preparation programs accountable, improve the knowledge of prospective teachers, and ensure that teachers are well prepared for teaching. Within the TQE grant, the Cross-Articulation Team is focused on a variety of goals related to course transfer, including the possible creation of a statewide articulation agreement for community colleges and teacher education programs at four-year institutions.

In January 2008, the Cross-Articulation Team commissioned Learning Point Associates to conduct a study to identify the barriers students face in the process of transferring from a community college to a teacher education program and the resources used by students in the transfer process. Learning Point Associates gathered information on these two aspects of the transfer process by conducting a survey of teacher education transfer students and interviewing community college advisors. The goal of this work is to provide universities and community colleges a better understanding of the strengths and weaknesses of the transfer process.

This report includes four main sections, as follows: (1) a description of the methodology used to survey transfer students and interview community college advisors, (2) an analysis of the results of the student survey, (3) a discussion of the findings from the interviews with community college advisors, and (4) a summary of the findings.

¹ There are different types of articulation agreements in Iowa. A statewide articulation agreement allows for the transfer of an Associates of Arts (A.A.) degree between community colleges and the four-year Regent institutions. Some private four-year institutions have developed general articulation agreements that define the transfer of community college associate's degrees.

Methodology

The Cross-Articulation Team requested that Learning Point Associates examine the supports and barriers in the process of transferring community college courses to teacher education programs. To gather information on the transfer process, we conducted two data-collection activities: an online survey of teacher education students who transferred community college courses and telephone interviews with community college advisors who work with students interested in pursuing a teaching degree.

Online Survey

The online survey included teacher education students at six four-year institutions in Iowa. We selected a purposive sample of four-year institutions in the state that offer a teacher education degree. The Cross-Articulation Team expressed an interest in having a mix of public and private institutions; so, we included all three Regent universities and three private institutions. We selected private institutions based on the size of their transfer population. We ranked private institutions based on a recent study that examined the number of community college students that transferred to four-year institutions across the state (Laanan et al., 2007). The three private institutions that received the largest number of transfer students were selected to participate in the study. This approach increased the likelihood that the selected institutions would have an adequate number of transfer students for the survey.

The resulting sample is not representative of all of teacher education programs in the state of Iowa. Rather, the survey findings are specific to the Regent universities and the three private institutions with the largest number of community college transfer students. The three Regent universities in the sample range in size from 12,000 to 30,000 students, and the three private institutions range in size from 2,000 to more than 5,000 students. In terms of geographic distribution, the four-year institutions are located in five different community college districts across the state. The private institutions included in the study are based in the western, central, and northeastern regions of the state.

The survey included students who had *any* community college credit prior to enrolling in a teacher education program. Rather than selecting a random sample of students, we surveyed the full population that met the eligibility criterion. Each teacher education program identified eligible students based on current enrollment data. The number of students identified by each institution ranged from 60 to more than 1,400, for a total of about 2,600 students. In addition, the survey confirmed students' eligibility by asking whether they had any community college credits prior to enrolling in a current teacher education program. This question identified 69 students as ineligible for the survey, resulting in a total of 2,543 students who qualified for the survey, which included 2,060 public students and 483 private students.

The survey methodology has a key shortcoming—it excludes students who did not to attend a teacher education program because of issues related to the transfer of community college courses. The survey includes only those students who successfully made the transition to a four-year institution. Ideally, the survey would have included all students who planned to transfer community college courses to a teacher education program, regardless of whether they

eventually completed the transfer process. The exclusion of these students potentially omits additional students who faced challenges and failed to complete the transfer process.

Students received information about the survey through an initial email that requested their participation. We sent emails to students one week after the end of their institution's spring break, and provided students three weeks to complete the survey. Several emails were sent to remind students about the survey, and we offered an incentive of a \$100 gift card to two randomly selected respondents to encourage participation.

We received a total of 358 completed responses from eligible students, for a 14 percent response rate. The response rate was the same for public and private institutions. A low response rate may introduce bias into the results if nonresponders are different from responders in ways that are related to the outcome measures. Because of study limitations, we were unable to follow up with nonresponders to determine how they differed from students who responded.

Our analysis excludes 13 students who transferred credits from community colleges located in other states. Because the purpose of the Cross-Articulation Team is to address issues related to the transfer of coursework from Iowa's community colleges to its four-year institutions, we excluded out-of-state transfer students. The remaining sample of 345 students provides the basis for our analysis.

The online survey (see Appendix A) included questions about the transfer of general education and teacher education coursework from a community college to a teacher education program. To assess how students viewed the course transfer process, the survey asked students to rate the ease of the process. A series of close-ended questions was used to identify which challenges students had experienced in the process and the resources they had used to support the process. A literature review of the common challenges and resources in the transfer process provided the basis for these questions. Several background questions provided context for interpreting the results, such as the number of community college credits, degrees completed, status at transfer, and demographic information.

Telephone Interviews

Because the online survey did not include students who attempted to transfer to a teacher education program but did not complete the process, we conducted telephone interviews with six community college advisors. We selected the community colleges that sent the largest number of transfer students to the teacher education programs included in our sample. The dean of each teacher education program provided an estimate of which community colleges sent the most transfer students to the program. This approach ensured a sample of community colleges that had experience working with students who transferred to a teacher education program. However, a limitation of this approach is that community colleges sending a large number of students to teacher education programs may have the fewest challenges in the transfer process.

Within each community college, we tried to identify an advisor who worked with students interested in pursuing a community college degree. Community colleges identified an advisor as well as a program director or instructor who had a secondary role as an advisor to students. As a

result, for each community college, we conducted two interviews, usually one with an advisor and one with another staff person involved in advising.

We conducted all of the interviews by phone using a structured protocol (see Appendix B for interview questions). The questions focused on the supports and barriers in the transfer process. We asked advisors how students identified courses that would transfer and how students transferred these courses to a four-year institution. Challenges in the transfer process may occur at either of these points. The protocol also distinguished between the transfer of general education and teacher education coursework because the challenges and barriers for each type are likely to be different.

Student Perspectives on Course Transfer

The online survey captured the perspective of students who transferred community college courses to a teacher education program. The survey gathered information on when students began planning their transfer, the types of courses students transferred, the challenges students faced in the transfer process, and the resources and tools students used to support the transfer process.

Throughout the survey analysis, a distinction is made between the transfer of general education courses and teacher education courses. This distinction is important because general education and teacher education courses transfer differently from a community college to a four-year institution. The transfer of general education courses is guided by articulation agreements that allow students to transfer their A.A. degree to meet general education requirements at a four-year institution. For example, a statewide articulation agreement defines the transfer of an A.A. degree from an Iowa community college to the three Regent universities, while general articulation agreements provide the basis of transferring an A.A. degree between community colleges and private four-year institutions. There are no formal articulation agreements that define the transfer of teacher education courses to meet requirements for a teacher education program. These courses are transferred on a course-by-course basis unless the community college has worked out an informal arrangement for the transfer of teacher education courses.

Since transfer students differ in the amount of community college credits they have completed, the following section describes three types of transfer students. The next section examines the timing of when students sought information on transferring and the type of courses transferred by survey respondents. The subsequent sections analyze student opinions of the transfer process, challenges in the transfer process, and resources used for the transfer process.

Types of Transfer Students

To capture the full range of transfer experiences, the survey included students who had *any* community college credits before enrolling in their teacher education program. As a result, teacher education students who responded to the survey had a variety of community college backgrounds. About one third of respondents completed fewer than 15 community college credits, one third completed 16–60 credits, and another third completed more than 60 credits. Just under half of the respondents (45 percent) earned an associate's degree before enrolling in a teacher education program. Based on their community college experience before enrolling in a teacher education program, we organized survey respondents into the following categories:

- **Minimal coursework, no associate's degree.** Thirty percent of respondents took fewer than 15 hours of community college courses and did not earn an associate's degree. These respondents most likely transferred a small number of community college courses to fulfill a specific requirement at their four-year institutions. These respondents are referred to throughout the report as *respondents with minimal coursework*.
- **Some coursework, no associate's degree.** Twenty-four percent of respondents completed more than 15 hours of community college credits but did not earn an associate's degree. These respondents may have taken community college courses with

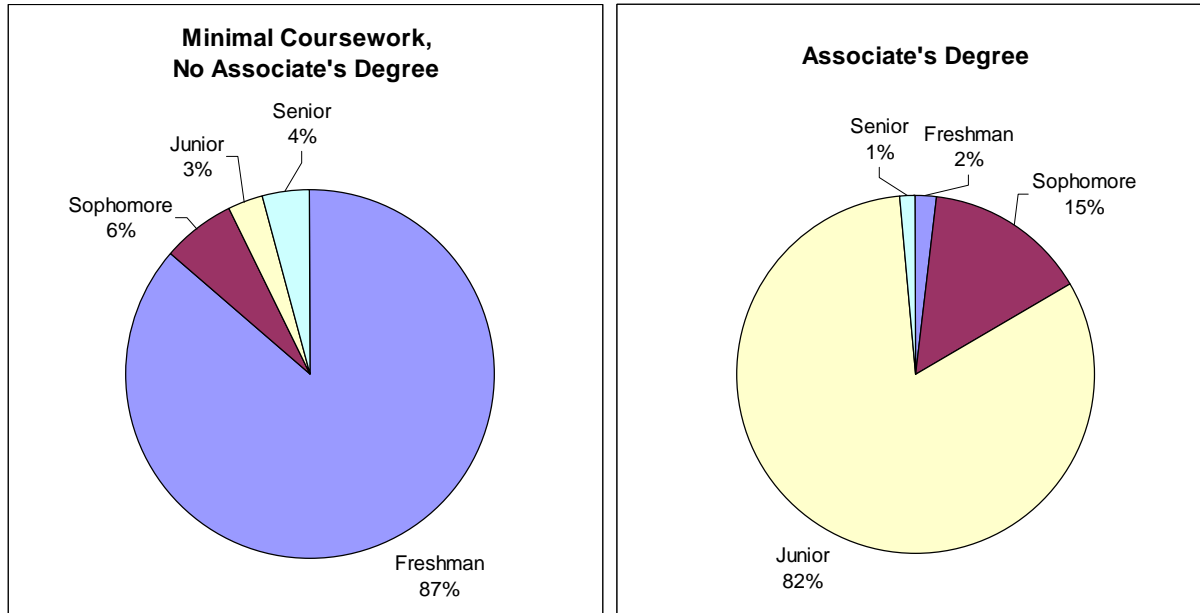
the intention of transferring individual courses or a block of courses to complete requirements at their four-year institutions. The report refers to this category as *respondents with some coursework*.

- **Associate's degree.** Forty-six percent of survey respondents completed an associate's degree, with most earning an A.A. Most of these respondents (about 90 percent) transferred their A.A. to meet general education requirements at their four-year institutions. In this report, these respondents are referred to as *respondents with an associate's degree*.

The experience of transferring courses is likely to vary across these groups of respondents because of statewide and general articulation agreements that allow students to transfer an associate's degree to meet general education requirements at many four-year institutions in Iowa. Instead of having to transfer each course individually, these students complete an associate's degree and can transfer it to their four-year institution to fulfill general education requirements. Students who complete community college coursework without obtaining a degree typically transfer credits on a course-by-course basis. This can lead to additional challenges because four-year institutions may accept some general education courses as part of the associate's degree but not as an individual course transfer.

Distinct differences emerge in the education path of these three types of transfer students (see Figure 1). Most respondents with minimal coursework initially transferred as freshmen to four-year institutions. They may have transferred community college courses to reduce their course load as freshmen or to reduce the amount of time required to complete their degree at a four-year institution. As expected, more than 80 percent of respondents with an associate's degree transferred to their four-year institutions as juniors. Statewide articulation agreements specify that students with an associate's degree transfer into four-year institutions as juniors. About 15 percent of respondents with an associate's degree transferred to a four-year institution as sophomores. Respondents with some coursework transferred to their four-year institutions as a mix of freshmen (37 percent), sophomores (35 percent), juniors (26 percent), and seniors (2 percent).

Figure 1. Status When Respondents First Transfer to a Four-Year Institution

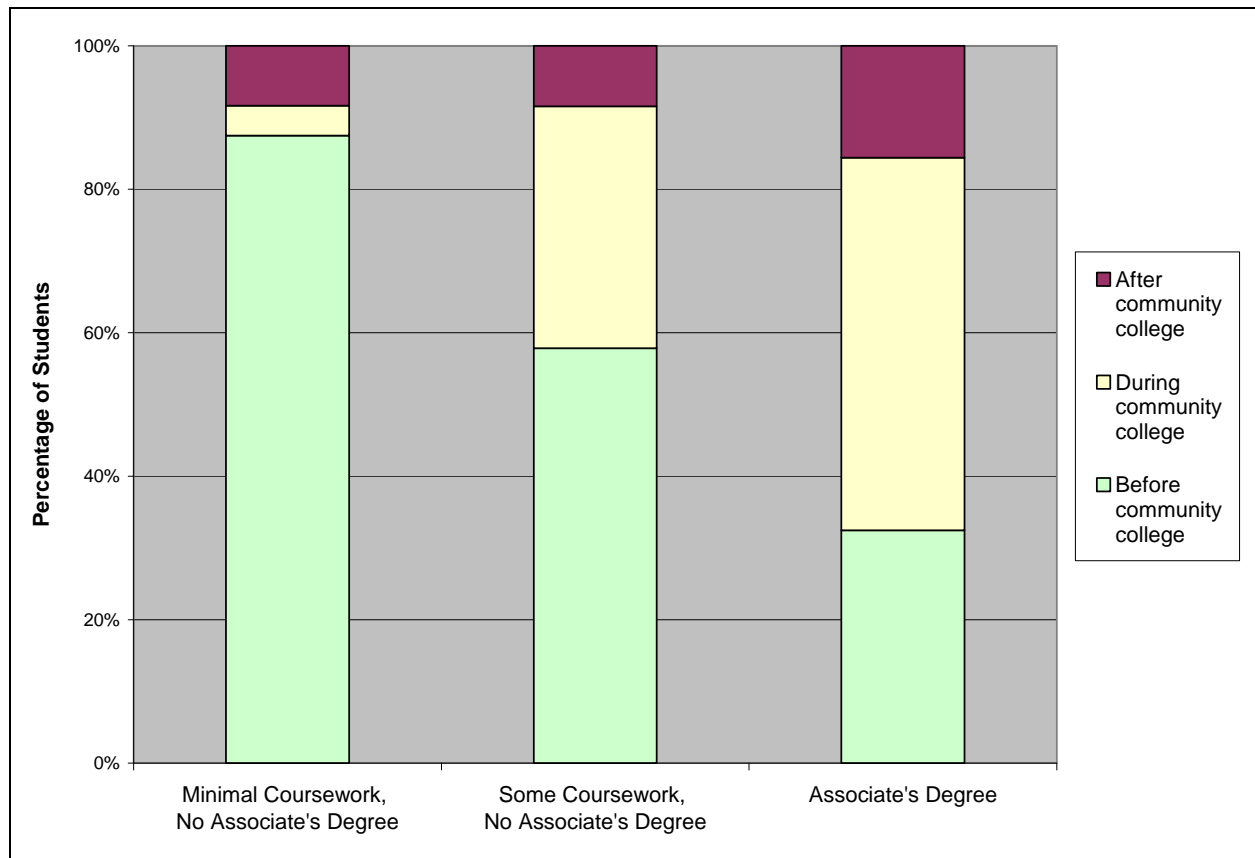


Transfer Planning

The earlier that students seek information on transferring, the more time they potentially have to identify courses that will transfer, learn about the transfer process, and prepare for their eventual transfer. The survey asked students when they initially sought information about transferring from a community college to a four-year institution. Just over half of survey respondents first sought information on transferring to their four-year institution *before* they enrolled in a community college. A third of respondents began planning their transfer *during* community college, and the remaining 10 percent did not seek information on transferring to a four-year institution until *after* they left a community college, with or without a degree.

The three types of transfer students sought information on transferring to a four-year institution at different times (see Figure 2). Most respondents with minimal coursework began planning their transfer before enrolling in community college. This finding suggests that students who plan to transfer minimal amounts of coursework may have specific requirements from their four-year institutions that they fulfill with community college credits. These students may be more likely to plan their transfer before community college to ensure these individual courses transfer. This contrasts sharply with respondents who obtained associate's degrees and were more likely to begin planning their transfer during community college. About half of respondents with an associate's degree first sought information on transferring during community college. These students may delay their initial planning because they know they can transfer as a junior. Among respondents with some community college coursework, more than half initiated their planning before community college and one third began during community college.

Figure 2. Timing of When Respondents First Sought Information on Transferring to their Four-Year Institution



Type of Course Transfer

The survey provides insight into whether teacher education students transfer general education courses, teacher education courses, or both types of courses. In addition, the survey distinguishes whether respondents *attempted* to transfer each type of course and whether the four-year institution *accepted* any of the courses.

Almost all respondents who had community college credits prior to enrolling in a teacher education program transferred these credits to meet general education requirements at a four-year institution. Table 1 shows that 97 percent of survey respondents attempted to transfer community college courses for general education requirements. All but two of the respondents reported that their four-year institution accepted at least one community college course to meet these requirements.

The transfer of community college courses to meet teacher education requirements is less common than the transfer of courses to meet general education requirements. Sixty percent of respondents with community college credits attempted to transfer courses for teacher education requirements. The transfer of teacher education coursework may be less common because some community colleges do not offer teacher education courses, or because students delay their decision to pursue an education degree. Similar to the transfer of general education courses, the

vast majority of respondents who attempted to transfer courses had at least some courses accepted for teacher education requirements. Overall, 57 percent of respondents reported that their current four-year institution accepted at least one community college course to meet teacher education requirements.

Table 1. Number and Percentage of Respondents Transferring General Education and Teacher Education Courses

	Number of Survey Respondents	Percentage of Survey Respondents
General Education Course Requirements		
Attempted to transfer courses	334	97%
Institution accepted at least one course	332	96%
Teacher Education Course Requirements		
Attempted to transfer courses	205	60%
Institution accepted at least one course	191	57%

Among the different types of transfer students, those with an associate’s degree were most likely to transfer teacher education courses. More than 75 percent of respondents with an associate’s degree attempted to transfer teacher education courses, compared to only 36 percent of respondents with minimal community college coursework. This finding is expected because most of the respondents with minimal community college coursework transfer to a four-year institution as freshmen and may not have enrolled in teacher education courses at their community college.

About half of respondents with some community college coursework tried to transfer teacher education courses. The more community college credits these respondents had, the more likely they were to transfer courses to meet teacher education requirements. For example, respondents who took more than 30 community college credits without earning a degree transferred teacher education courses at rates similar to respondents who had associate’s degrees.

Student Opinions of Course Transfer

Throughout the following analysis of course transfer, we focus on students who *attempted* to transfer either general education or teacher education courses. We included only students who attempted to transfer courses because they have experience with the transfer process. For example, students who did not attempt to transfer teacher education courses may not have taken teacher education coursework and may not have a basis for commenting on the transfer process.

Most respondents who attempted to transfer general education or teacher education courses from a community college to a four-year institution described the process as “easy” or “somewhat easy.” Among the 334 survey respondents who tried to transfer general education courses, 86 percent described the process this way. Similarly, 80 percent of respondents who tried to transfer teacher education courses described the process as easy or somewhat easy. The proportion of

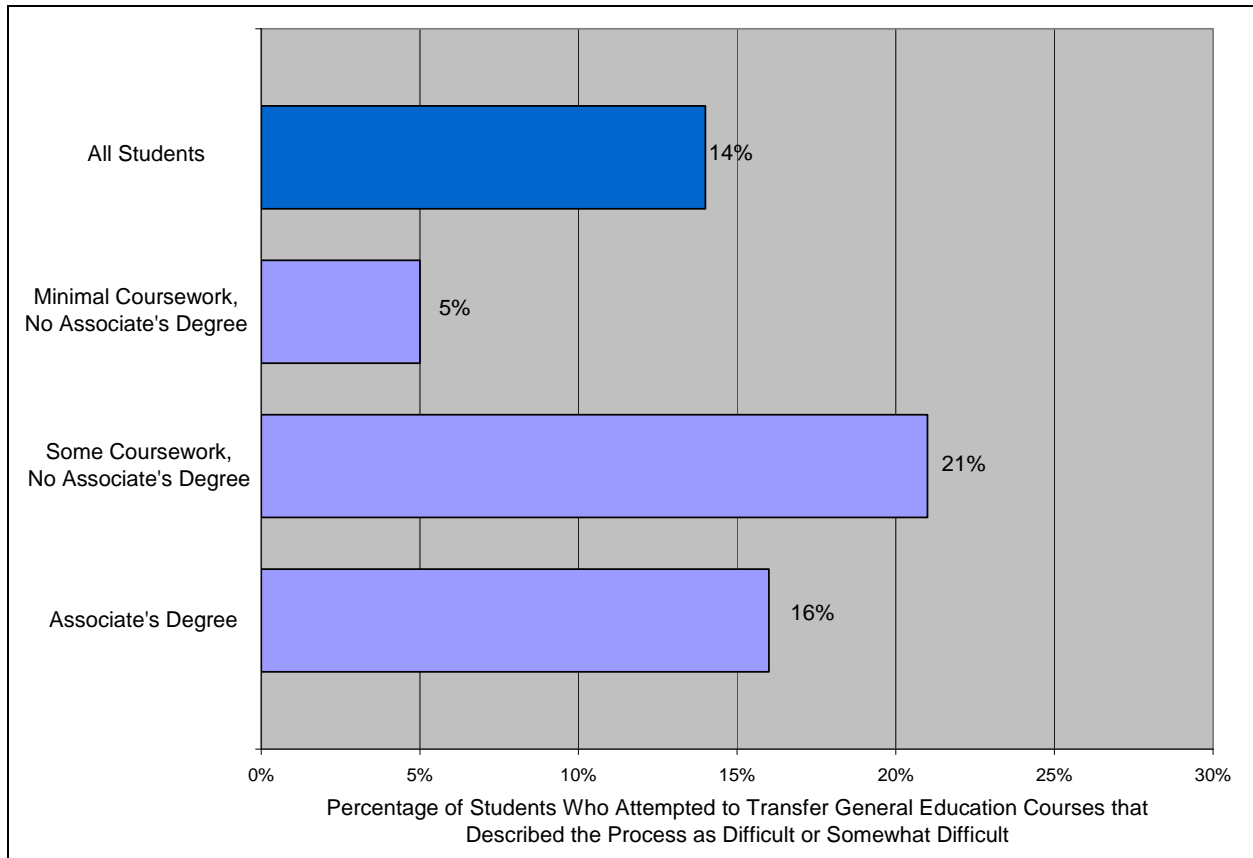
respondents who tried to transfer courses and found the process “difficult” or “somewhat difficult” was 14 percent for general education courses and 20 percent for teacher education courses.

A closer examination of the data shows that certain types of students were more likely to have difficulty in the process of transferring general education courses (see Figure 3). Among students who attempted to transfer general education courses, 21 percent described the transfer of general education courses this way, compared to 16 percent of respondents with an associate’s degree and 5 percent for respondents with minimal coursework.

The proportion of respondents who found the transfer of general education courses difficult increases with the number of community college credits completed for respondents without an associate’s degree. Although 36 percent of respondents with more than 60 credits found the process difficult, 14 percent of respondents with 16 to 30 credits described it as difficult. As mentioned above, students without an associate’s degree typically transfer credits on a course-by-course basis. Transferring courses in this way may lead to more challenges for a couple of reasons. First, four-year institutions may accept certain courses as part of an associate’s degree but not accept these courses if transferred individually. Second, there are more opportunities for students without an A.A. degree to make a mistake in selecting courses when they take a large number of credits.

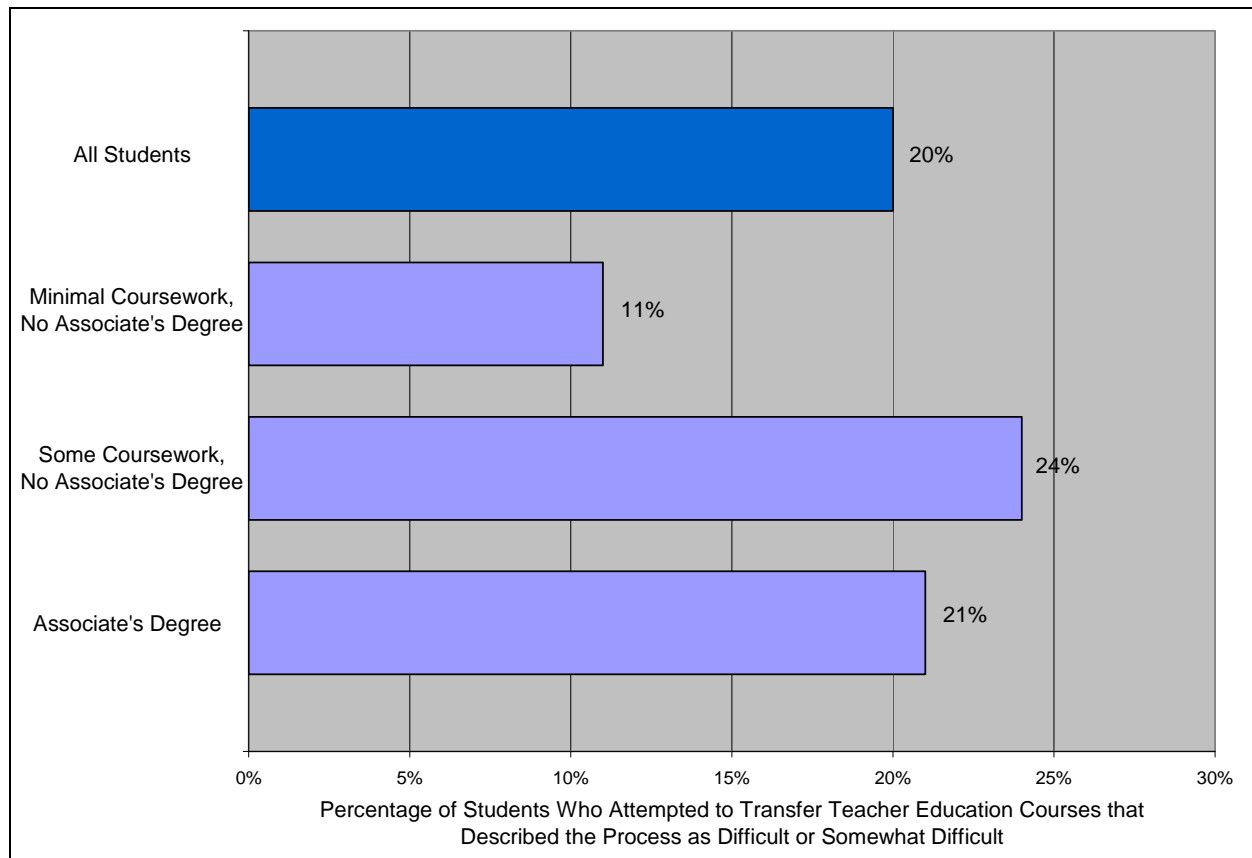
It is possible that these distinctions reflect differences across the three types of students. For example, respondents with minimal coursework may report the least difficulty because they have more resources or because they have more time to plan and identify courses that transfer. Without additional information about the different types of respondents, it is not possible to distinguish which factors—whether personal characteristics, the transfer process, or any other factors—led to differences in whether respondents found the process difficult.

Figure 3. Percentage of Respondents Who Attempted to Transfer General Education Courses and Described the Process as Difficult or Somewhat Difficult



Across all types of students, a higher proportion of those who tried to transfer teacher education courses found the process difficult compared to the transfer of general education courses (see Figure 4). Among respondents with some coursework and respondents with an associate's degree, more than 20 percent described the process as difficult. While respondents with an associate's degree can transfer their degree to meet general education requirements, articulation agreements do not cover the transfer of teacher education requirements. This may explain why the proportion of these respondents who found the transfer of teacher education courses difficult was higher than the proportion who described the transfer of general education courses as difficult.

Figure 4. Percentage of Respondents Who Attempted to Transfer Teacher Education Courses and Described the Process as Difficult or Somewhat Difficult



Challenges in the Transfer Process

The survey investigated the prevalence of three challenges often associated with the process of transferring community college courses: (1) a four-year institution accepts fewer courses than a student expected; (2) a student retakes a community college class to meet a general education or teacher education requirement; and (3) a student takes more community college courses than he or she originally expected, in order to meet a general education or teacher education requirement. We explore these challenges separately for the transfer of general education and teacher education courses.

Transfer of General Education Coursework

Overall, 17 percent of respondents who attempted to transfer general education coursework had fewer courses accepted than they expected. This challenge was more common among those with some coursework and those with an associate's degree than among those with minimal coursework (see Table 2). For a variety of reasons, students may have fewer general education courses accepted than they expected. For instance, a student may have a misperception about which or how many courses transfer or may have failed one or more community college courses. In addition, students may take lower level remediation courses that do not transfer to four-year

institutions; or take general education courses that are only accepted by an institution as part of an associate's degree.

About one in four respondents who attempted to transfer general education courses repeated a community college course to meet general education requirements. The same proportion took more community college courses than expected to meet general education requirements. Respondents with an associate's degree were more likely to repeat a community college course, and respondents with some coursework were more likely to take more community college courses than expected. Just over 30 percent of those with an associate's degree who attempted to transfer general education courses took more community college courses than expected to meet a general education requirement. This finding could reflect several factors, such as students with misguided expectations of course requirements, students who change majors just before transferring, or students who took developmental courses at a community college. This finding is surprising, given that articulation agreements allow students to transfer the associate's degree to fulfill general education requirements.

Table 2. The Prevalence of Challenges in Transferring General Education Courses

	Respondents Who Attempted to Transfer General Education Coursework							
	All Respondents		Respondents with Minimal Coursework		Respondents With Some Coursework		Respondents With an Associate's Degree	
	No.	%	No.	%	No.	%	No.	%
Institution Accepted Fewer General Education Courses than Expected	57	17%	13	13%	21	21%	27	18%
Repeated a Community College Course to Meet General Education Requirements	88	26%	21	22%	18	22%	49	32%
Took More Community College Courses than Expected to Meet General Education Requirements	86	26%	22	23%	25	30%	39	25%

Transfer of Teacher Education Coursework

Among respondents who attempted to transfer teacher education courses, about one in four had fewer teacher education courses accepted than expected (see Table 3). A higher proportion of respondents faced this challenge in the transfer of teacher education coursework than in the transfer of general education coursework. Two types of respondents—those with some coursework and those with an associate's degree—experienced this challenge at a higher rate.

Twenty-six percent of respondents who attempted to transfer teacher education courses repeated a community college course to meet teacher education requirements. A slightly lower proportion, 22 percent, took more community college courses than expected to meet teacher education requirements. Respondents with some coursework were more likely to experience both of these challenges. One third of respondents with some coursework (who attempted to

transfer teacher education coursework) repeated a course or took more courses than expected. Among those with an associate's degrees who attempted to transfer teacher education courses, 27 percent repeated a community college course in order to meet a teacher education requirement.

The survey asked about an additional challenge related to the transfer of teacher education coursework. Respondents were asked if they completed a field experience at the community college that was not accepted by their four-year institution. A lower proportion of respondents experienced this challenge compared to the other challenges. Just over 15 percent of respondents with an associate's degree who tried to transfer teacher education courses experienced this challenge, the highest proportion among the different types of students.

Table 3. The Prevalence of Challenges in Transferring Teacher Education Courses

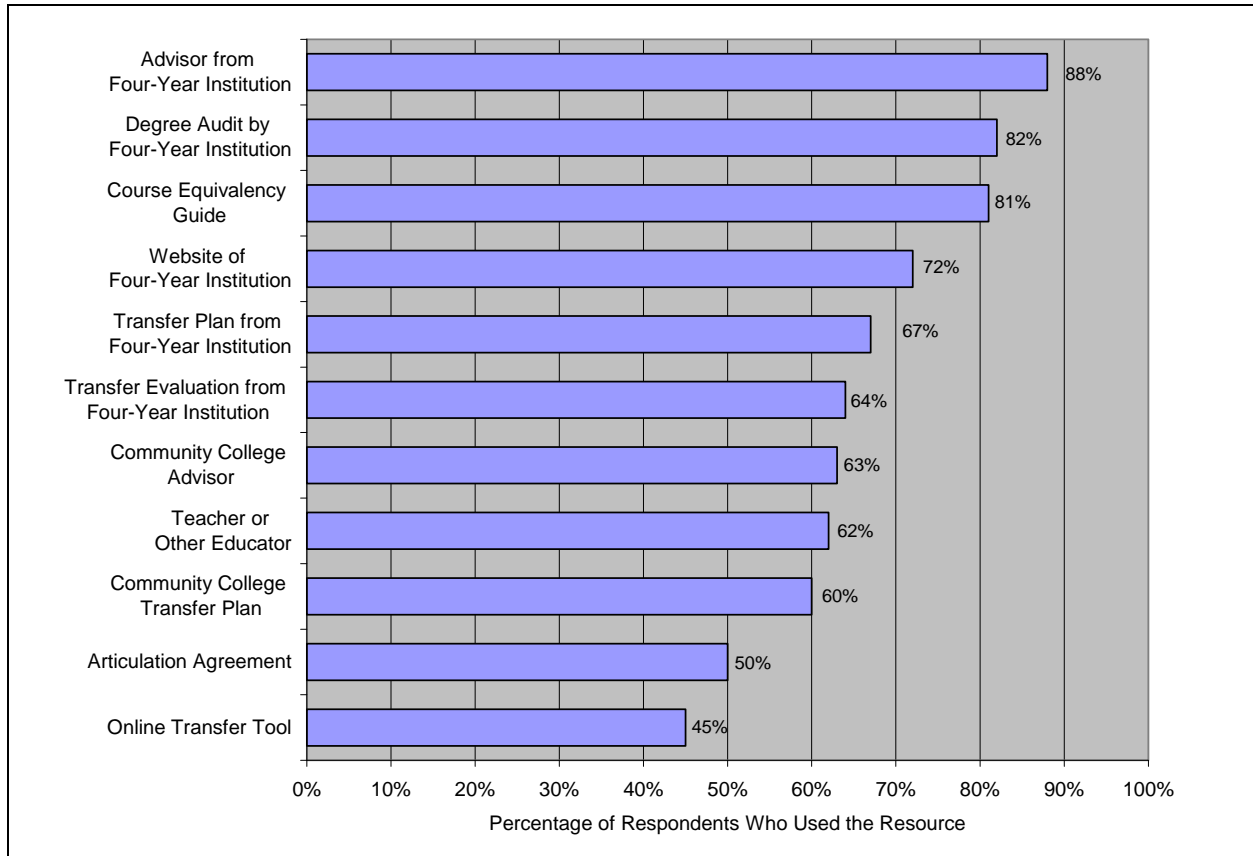
	Respondents Who Attempted to Transfer Teacher Education Coursework							
	All Respondents		Respondents with Minimal Coursework		Respondents With Some Coursework		Respondents With an Associate's Degree	
	No.	%	No.	%	No.	%	No.	%
Institution Accepted Fewer Teacher Education Courses than Expected	53	26%	5	14%	12	26%	36	30%
Repeated a Community College Course to Meet Teacher Education Requirements	54	26%	6	16%	15	33%	33	27%
Took More Community College Courses than Expected to Meet Teacher Education Requirements	46	22%	7	19%	15	33%	24	20%
Field Experience Not Accepted	24	12%	1	3%	4	9%	19	16%

Supports for the Transfer Process

Community college students potentially rely on a variety of supports in the process of transferring courses to a four-year institution. The survey asked respondents which resources they used in the transfer process and whether they found them useful. To compile a list of potential resources, we relied on a report by Iowa's Liaison Advisory Committee on Transfer Students (2003) that outlined the resources available for transfer students.

Figure 5 shows how many respondents used each resource, and Figure 6 shows the proportion of those respondents who found the resources "useful" or "very useful." Advisors at four-year institutions are at the top of the list, with 88 percent of respondents reporting that they relied on an advisor. Several other resources provided by four-year institutions are commonly used by respondents, including a degree audit (82 percent), the website for the four-year institution (72 percent), a transfer plan (67 percent), and transfer evaluations from the four-year institution (62 percent). Among the respondents who used each resource, more than two thirds described each resource as useful or very useful. The high rate of respondents using resources from a four-year institution is expected because four-year institutions have the ultimate authority to decide whether a course transfers.

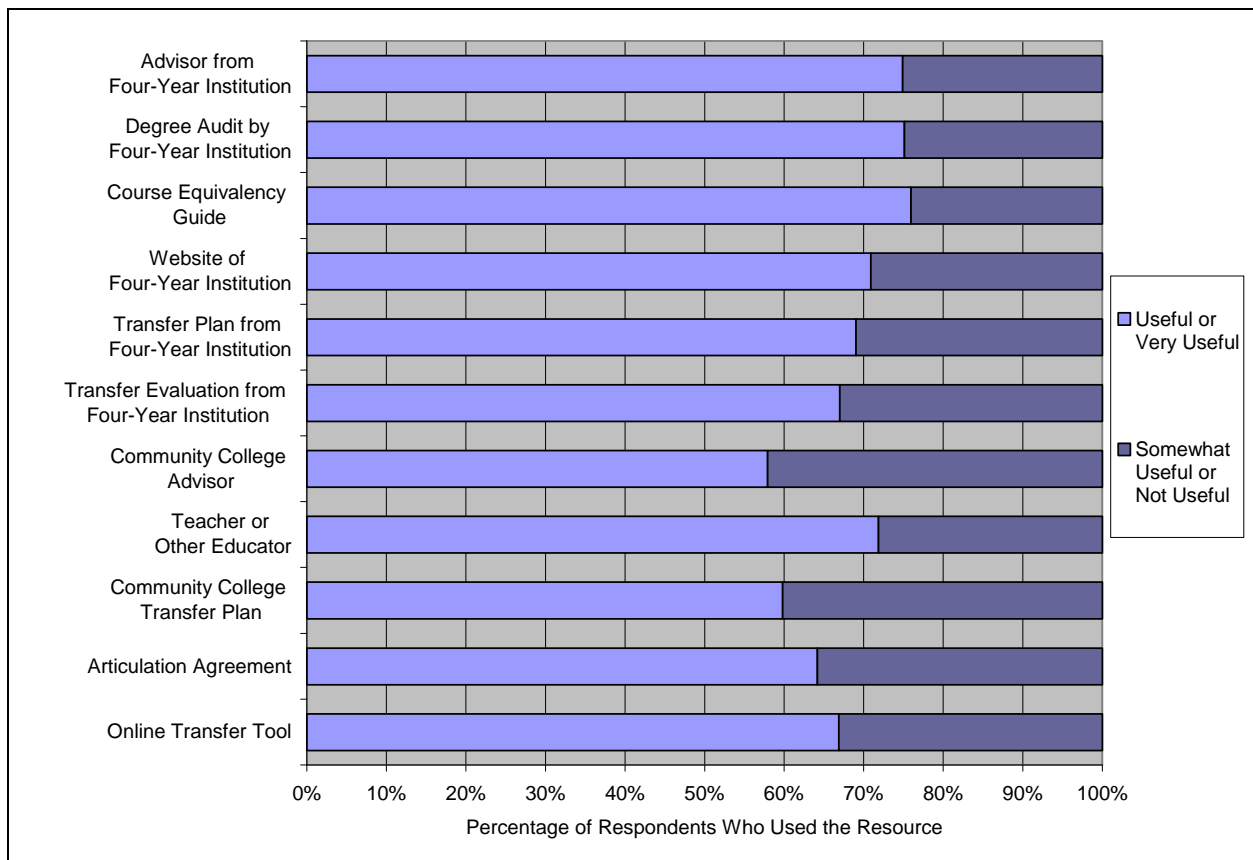
Figure 5. Percentage of Respondents Who Used Each Resource



Fewer respondents relied on resources from a community college for the transfer process: 63 percent of respondents used a community college advisor, and 60 percent relied on a transfer plan from the community college. In addition, a lower percentage of respondents using these resources found them useful compared to other resources: 58 percent of those using a community college advisor and 60 percent of those using a community college transfer plan described them as useful or very useful.

A relatively high proportion of respondents used course equivalency guides and found them useful: More than 80 percent of respondents used a course equivalency guide, and three fourths of those found it useful. Course equivalency guides describe how individual courses transfer from a community college to a four-year institution. Although a smaller number of respondents used articulation agreements, two thirds of those who used an agreement found it useful. As mentioned, statewide and general articulation agreements define how an associate's degree transfers to meet general education requirements at a four-year institution.

Figure 6. Percentage of Respondents Who Found Each Resource Useful or Very Useful



Two resources had fewer users but received strong ratings for usefulness among those who relied on them. Fewer than half of all respondents used an online transfer tool, but 67 percent of those who used one found it useful. An example of an online transfer tool is the University of Northern Iowa’s Transfer Plan-It that allows students to enter their courses and determine how they transfer. Similarly, a relatively high proportion of respondents who relied on a teacher or educator as a resource found them to be useful (72 percent).

Most respondents relied on multiple resources in the process of transferring community college courses. Sixty percent of respondents used more than four resources. The patterns of use differed across the different types of students. Half of respondents with an associate’s degree used more than eight resources, compared to 40 percent of respondents with some coursework and 17 percent of respondents with minimal coursework.

Perspective of Community College Advisors

To assess the barriers and supports in the process of transferring community college courses to a four-year teacher education program, we interviewed advisors from six community colleges in Iowa. Advisors were asked about the teacher education offerings at their community college, challenges in the process of selecting and transferring courses, and resources available to support students in the transfer process.

Teacher Education Course Offerings

Community colleges in our sample typically offered general education coursework geared toward the requirements of a teacher education program. Teacher education programs may have specific general education course requirements within the broader core required by the four-year institution. For example, at one community college, teacher education students take American history rather than economics to fulfill their social science course requirement. In addition, some community colleges offer courses that meet teacher education requirements within a teacher education program. These include lower level teacher education courses that sometimes serve as prerequisites for junior-level teacher education courses.

The community colleges differed in the amount of coursework they offered for teacher education students, as follows:

- One community college offered only the general education courses required by teacher education programs and did not offer teacher education courses.
- Two of the community colleges combined the general education coursework with six to eight teacher education courses.
- Three community colleges offered general education coursework and more than 10 teacher education courses.

In addition, these community colleges had different approaches to structuring their education offerings. Two of the community colleges offered an A.A. with a concentration in elementary education, secondary education, or early childhood education. One community college offered a pre-education track for the A.A., and another offered an Education Careers degree. Another community college offered an associate's degree in liberal arts but allowed students to nominally declare education as their area of study.

Supports for the Transfer Process

Community college advisors identified a variety of support mechanisms that students can access in the process of transferring community college courses to a teacher education program. During our interviews, community college advisors described the following supports for the transfer process.

Articulation Agreements. Articulation agreements provide the basis for transferring an A.A. from a community college to meet general education requirements at a four-year institution. The

agreements allow a student to transfer the degree as a single package of courses and enter the four-year institution as a junior. Iowa has statewide articulation agreements that define the transfer of associate's degrees to the three Regent universities, and community colleges in the state may have individual articulation agreements with private four-year institutions.

The community colleges in our sample described having articulation agreements in place with the Regent universities and several private institutions. Some of the community colleges had articulation agreements with a handful of private institutions to which students commonly transferred, including institutions located in close proximity to the community college or those that had a long-term relationship with the institution. One community college reported that it had articulation agreements with more than half of the private four-year institutions in the state.

Although students may not access or use the agreements themselves, advisors described how articulation agreements ensure the transfer of the A.A. to meet general education requirements at a four-year institution. According to the community college advisors, students who completed an A.A. transferred as juniors to four-year institutions with an articulation agreement. The advisors we interviewed described the process as fairly straightforward with few challenges; two advisors described the A.A. transfer as “easy” and “a smooth transition.”

Transfer Plans. Advisors at five of the community colleges described the use of transfer plans to support the transfer of teacher education courses to four-year institutions. These plans define which community college courses a teacher education program will accept to meet its teacher education requirements. Transfer plans are needed to articulate the transfer of courses for teacher education requirements because articulation agreements cover only the transfer of courses to meet general education requirements.

The transfer plans are often structured as a schedule or plan to guide course selection for students interested in pursuing an education degree. For example, one community college developed two-year sample plans for students interested in transferring to selected teacher education programs. The sample plans serve as a “strong recommendation” for which courses a student should take each semester at the community college in preparation for transfer to a teacher education program. The community colleges develop a separate transfer plan for each teacher education program. According to the advisors, students can access transfer plans during meetings with an advisor or through the community college website.

Three community colleges offered a generic transfer plan for students who had not yet decided which teacher education program they would attend. One community college created a generic transfer plan by comparing transfer plans for teacher education programs in order to identify which courses were accepted by a majority of the programs. An advisor at another community college showed students the transfer plans for multiple teacher education programs so they could understand the differences in courses accepted.

In the absence of formal articulation agreements for teacher education courses, transfer plans serve as informal arrangements between community colleges and four-year institutions to transfer these courses. The community college communicates with four-year institutions to determine how teacher education courses offered by the community college will meet teacher

education course requirements at the four-year institution. The transfer plans are regularly updated to account for changes in course offerings at the community college or changes in course requirements for teacher education programs. The advising center at one community college had responsibility for updating transfer plans, and the registrar's office at another community college tracked changes in teacher education requirements for the Regent universities.

Community college advisors noted that transfer plans represent an arrangement or understanding between the community college and four-year institution but that they are not formal agreements. One advisor emphasized that the transfer plans are not signed by anyone at the four-year institutions. Another described how transfer admissions counselors at four-year institutions approved the information contained in the transfer plans. Community college advisors recommended that students contact someone at the four-year institution to confirm the accuracy of information in the transfer plans. However, the community college advisors we interviewed had not experienced any issues with teacher education programs not accepting courses outlined in the transfer plans.

Community College Advisors and Course Instructors. Community college advisors and course instructors served as resources for the transfer of courses in all of the community colleges included in our sample. The structure and intensity of advising varied across the community colleges. One of the larger community colleges conducted group advising sessions twice a year for students pursuing a degree in education. During these sessions, course instructors provide one-on-one advising assistance, distribute transfer plans, and make general announcements related to course transfer. The community college also had advisors available for one-on-one meetings at an advising center.

Other community college advisors described one-on-one advising sessions with students that typically occurred twice a year during course registration periods. During these sessions, community college advisors discussed course selection, shared transfer plans, and answered any questions students had about the transfer process. Advisors also provided access to and information on contacts at the four-year institutions to which students commonly transferred. One advisor described using the transfer plans and working with students to develop an overall plan for their courses. The advisor noted the important role advisors play because of their knowledge of transfer requirements. An advisor at one of the smaller community colleges led visits to four-year institutions for interested students.

Community college instructors served as a resource in two ways. First, instructors provided information about the transfer process to students during teacher education classes at the community college. Instructors might discuss the transfer process, remind students to contact the four-year institutions they planned to transfer to, inform students about the time frame for the transfer process, and provide encouragement for the process. Course instructors at one community college talk with students during class about taking the Praxis exam; at another community college, an instructor distributes transfer plans. One instructor noted that when she taught a class for which one of the teacher education programs did not accept transfer, she identified students who planned to transfer to this teacher education program at the beginning of the class to inform them. Instructors at community colleges that offer a teacher education track or

concentration with teacher education courses are more likely to serve as a resource. For example, one community college described how course instructors tried to keep students who are enrolled in the education track informed about the transfer process.

Course instructors also served as a source for one-on-one advising on transfer issues. Students can meet with course instructors to discuss the transfer process or education careers more broadly. One instructor noted that students use her as a resource to talk about courses they need to take. Course instructors may have contacts at teacher education programs who can assist students with questions they have about the transfer process. On community college instructor said, “I know lots of people. I just call them and ask them, and then we find out and can get that information to the students.”

Contacts at Four-Year Institutions. Community college advisors discussed the importance of having students establish contact with someone at the four-year institution to begin “building [a] good relationship with the transfer institution.” One community college recommended that students contact the admissions department at four-year institutions they are considering so they can start receiving information about the school. The advisor felt it was important for students to share their information with the four-year institution. Two community colleges were more specific about students contacting advisors at the teacher education program they plan to attend. One of these community colleges provided contact information for teacher education programs on the transfer plans.

One advisor described how having a contact at the teacher education program provided another layer of knowledge about the transfer process. She described the advantage as having someone from the four-year institution clarify whether a course will fulfill a course requirement at the institution before taking the course. Several advisors described the importance of maintaining and nurturing relationships with four-year institutions.

The community colleges in our sample also received visits, referred to as College Visits, by representatives from four-year institutions. Occurring in the fall and spring semesters, they were described as fairly open-ended sessions when students could meet with an advisor to ask questions about transferring or attending the four-year institution.

Websites for Community Colleges and Four-Year Institutions. Community colleges and four-year institutions offer links to a variety of transfer resources on their websites, including transfer plans, course equivalency guides, articulation agreements, and transfer evaluation tools. Three community colleges mentioned that their websites provided links to the websites of the four-year institutions to which students commonly transferred. Advisors from three community colleges specifically cited the University of Northern Iowa’s Transfer Plan-It tool that allows students to input their community college courses to see how the courses will transfer. The websites of community colleges provided access to course catalogs and, for one community college, access to information about the Praxis exam. Although there is a “wealth of knowledge” on these websites, according to an advisor, one challenge can be a lack of initiative on the part of students to access and use the websites. One community college noted the usefulness of four-year institution websites that have separate sections devoted to information on transfer students.

Introduction to Teaching Courses. Three community colleges described the role of introduction to teaching courses in helping students determine whether they want to pursue a degree in education. These education classes were viewed as an important resource for students who were undecided about their major. The introduction to teaching course provides an overview of teaching and allows students an opportunity to determine if education is a good fit. According to one community college, the background course provides exposure to the education field, including experience in a school and a better understanding about teacher education requirements, such as admissions tests and teacher portfolios. An advisor at this community college noted that about two thirds of the students who initially consider teacher education decide not to pursue a degree in this area after the introduction to teaching course. At another community college, undecided students are encouraged to take the introduction to teaching course because it is commonly accepted by teacher education programs and, therefore, when students decide to pursue education, they are less likely fall behind in the courses they need to complete.

Challenges in the Transfer Process

Community college advisors reported that students face few challenges in the process of transferring an associate's degree to meet general education requirements when an articulation agreement is in place. Advisors described this aspect of the transfer process as a “pretty smooth transition” and an “easy transfer.” However, advisors described challenges with the transfer of general education courses without an associate's degree, and with the transfer of teacher education coursework (with or without an associate's degree). In addition, the transfer of courses presented a challenge for students who delayed planning their transfer or who changed their mind about where they planned to transfer.

There are two important caveats for the findings in this section. First, community college advisors had more knowledge of the early stages in the course transfer process, when students identify and select courses, than the later stages of the process, when students submit transcripts to the four-year institution and complete the transfer of courses. As a result, our interviews may not adequately capture challenges that students face in their interaction with four-year institutions when community college transcripts are evaluated and transferred. Second, we selected community colleges that teacher education programs identified as sending the largest number of transfer students. By using this criterion, we may have selected community colleges that are less likely to have challenges in the transfer process.

The challenges identified by community college advisors are described below.

Transfer of General Education Courses Without a Degree. Students who transfer general education courses without completing an associate's degree typically transfer courses on a course-by-course basis. This means that a four-year institution conducts an audit or evaluation of each course to determine whether it transfers. Advisors from three community colleges described challenges related to the transfer of courses this way. Courses accepted by a four-year institution as part of an associate's degree may not be accepted when transferred without the degree. In addition, four-year institutions may count credits differently for courses transferred without a degree, and may be more “picky” about which courses will transfer. Advisors noted

that individuals taking one or two courses at the community college need to contact the four-year institution to confirm that the courses will transfer as expected.

Different Teacher Education Course Requirements. Teacher education programs have different teacher education course requirements and accept different teacher education courses for transfer. This creates a challenge for students because the teacher education courses a student should take at the community college differ, depending on the teacher education program. Advisors from three of the community colleges described this challenge related to the transfer of teacher education coursework. For example, an advisor described how one university does not accept the community college's educational foundations course because students are required to take the course at the university. According to an advisor from another community college, although one university accepts its evaluation and measurement course other universities do not require that particular course. Teacher education programs also have different field experience requirements for students entering their junior year.

The community colleges have adapted to this situation by relying on transfer plans to guide students in the selection of courses for a particular teacher education program. Advisors indicated that transfer plans guide course selection for students who know which teacher education program they plan to attend. However, even with the transfer plans, students who are undecided, or who change their minds, about which teacher education program they will attend face challenges. These students can initially take courses that are accepted by multiple teacher education programs using the generic transfer plans described above, but identifying courses accepted by all teacher education programs becomes more difficult over time. This presents a challenge because students often do not know which teacher education program they will attend until their second year at a community college.

As a result of the different teacher education course requirements, students may not fulfill all of the courses needed to begin as a junior at the teacher education school. Although the associate's degree ensures they transfer as a junior to the university, students who do not take all of the required teacher education courses may not have transfer status at the teacher education program within the college or university. Advisors from three community colleges noted that students who experience this challenge generally have to take additional courses, either at the community college or the four-year institution, before beginning the teacher education program. These courses may be prerequisites for higher-level courses at the teacher education program.

Two community college advisors suggested the need for an articulation agreement or degree that covers the transfer of courses to a teacher education program—similar to how articulation agreements ensure that the A.A. transfers to four-year institutions. The agreement or degree would define a set number of teacher education courses that teacher education programs would accept, reducing the likelihood that students would take courses that do not transfer. One community college advisor noted that a common associate's degree in teaching could support community college students in completing more of the teacher education program requirements, such as the portfolio, before transferring.

Timing of Transfer Decision. Several community college advisors noted that the transfer process is not as smooth when students are uncertain about whether they want to pursue an

education degree and which teacher education program they will attend. As one advisor noted, the transfer to a four-year institution is “pretty straightforward and easy,” but if students change their minds often “it becomes a problem.” Students who delay the decision to pursue an education degree may take general education courses or electives that do not meet the requirements of the teacher education program. For example, a student with an associate’s degree may not have taken specific general education courses required by the teacher education program.

Preparation for Admissions Process. The admissions process for teacher education programs presents a challenge for some students. Advisors noted that students are often unprepared for the admissions process—they may underestimate the effort required to complete the process or the length of time needed for the process. An advisor at one community college noted that the community college’s open admissions policy may give students misperceptions about the ease of the admissions process for four-year institutions, especially for first generation students. Students who fail to recognize the time required for the admissions process may not start it until too late in their second year of community college. Students may not understand that admission into a teacher education program requires a certain grade point average, or that required grade point averages serve as a minimum for some universities. In such cases, students may have to retake a course to raise their grade point average.

Praxis Exam. The Praxis exams required for entry into teacher education programs often present a challenge for community college students. Students may lack sufficient information about the Praxis or may not have adequate support in preparing for the exam. Two advisors noted that in contrast to students enrolled in a teacher education program, community college students pursuing a teaching degree are on their own to determine when, where, and how to take the Praxis exam. Because the Praxis is not a requirement of the community college, students may not realize the amount of time or preparation needed for the exam. Students at a teacher education program may take the exam at their program, but community college students must identify and travel to a location that offers the exam. Some advisors noted that they had received assistance from four-year institutions to understand the Praxis and support students in taking it.

Summary of Findings

We briefly summarize findings from the survey of transfer students and the interviews with community college advisors.

Survey of Transfer Students

Type of Coursework Transferred. The transfer of general education coursework was more common than the transfer of teacher education coursework. Almost all respondents (97 percent) attempted to transfer general education coursework, compared to 60 percent of respondents who attempted to transfer teacher education coursework. Respondents with an associate's degree were more likely than those without a degree to transfer teacher education courses.

Opinion of Transfer Process. Most respondents who attempted to transfer general education or teacher education coursework described the process as easy or somewhat easy. Eighty-six percent of respondents who tried to transfer general education coursework described the process as easy or somewhat easy, and 80 percent of students who attempted to transfer teacher education coursework described the process this way. Respondents with some coursework but no degree reported the most difficulty in transferring general education courses. The more community college credits respondents had completed (without a degree), the more likely they were to describe the process as difficult.

Challenges in Transfer of General Education Courses. About one in four respondents who attempted to transfer general education coursework repeated a community college course to meet general education requirements. The same proportion took more community college courses than originally expected to meet general education requirements. Just over 15 percent of respondents who attempted to transfer general education coursework had fewer courses accepted by their four-year institution than expected.

Challenges in Transfer of Teacher Education Courses. Among respondents who attempted to transfer teacher education coursework: 26 percent had fewer teacher education courses accepted than they expected, and—in order to meet teacher education requirements—26 percent repeated a community college course and 22 percent took more community college courses than they originally expected. Respondents with an associate's degree were more likely to report that their four-year institution accepted fewer courses than they expected; respondents with some coursework were more likely to repeat a course or take more courses than originally anticipated.

Most Commonly Used Transfer Resources. The most common resources used by respondents came from four-year institutions: transfer advisors, degree audits, websites of four-year institutions, transfer plans, and transfer evaluations. Eighty-eight percent of respondents used an advisor from a four-year institution, and between 64 percent and 82 percent of respondents used the other resources available from four-year institutions. At least two thirds of respondents who availed themselves of these resources described them as useful or somewhat useful. In addition, more than 80 percent of respondents used a course equivalency guide during the transfer process. A relatively high proportion of respondents who used a course equivalency guide described it as useful or somewhat useful.

Other Transfer Resources. Compared to resources from a four-year institution, a lower proportion of respondents used a community college advisor or a community college transfer plan. About 60 percent of those respondents who used these resources found them useful or somewhat useful. A majority of respondents identified a teacher or other educator as a resource for the transfer process, and most of those respondents described these teachers and educators as a useful source for information.

Interviews with Community College Advisors

Transfer of Associate's Degree. Advisors viewed the process of transferring associate's degrees to meet general education requirements as smooth, with few challenges. Articulation agreements facilitated the transfer of community college courses to meet general education course requirements.

Transfer Plans. Transfer plans are used by community colleges to (1) define the courses a teacher education program will accept from a community college, and (2) guide students in selecting courses that will transfer to their teacher education program. Community college advisors consistently identified transfer plans as an important resource for the transfer of teacher education coursework. The plans serve the dual role of defining how courses transfer and guiding course selection for community college students.

Other Supports for the Transfer Process. Community college advisors viewed advising, course instructors, and Internet resources as useful tools to support the transfer process. Community college advisors and course instructors assist students in selecting courses, link students with contacts at four-year institutions, and inform them about the application process for a teacher education program. Advisors refer students to the Internet for a variety of resources about the transfer process, including course equivalency guides, transfer plans, and online transfer tools.

Contact with Four-Year Institutions. Community college advisors recommend that students establish a contact at the four-year institution where they plan to transfer. Because four-year institutions ultimately decide whether courses transfer, most community college advisors recommend that students contact the four-year institution they plan to attend.

Prevalence of Challenges in Course Transfer. Although students face few challenges in transferring an associate's degree to general education requirements when an articulation agreement is in place, advisors described challenges with the transfer of general education courses without an associate's degree, and with the transfer of teacher education coursework (with or without an associate's degree). In addition, the transfer of courses presented a challenge for students who delayed planning their transfer or who changed their mind about where they planned to transfer.

Differences in Course Requirements and Course Transfer. One challenge is that teacher education programs have different teacher education course requirements and accept different teacher education courses for transfer. According to community college advisors, the different

course requirements make it difficult for students who have not decided or who change their mind about which teacher education program they will attend. These students may be more likely to take courses that do not transfer or need to repeat a course before transferring.

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Appendix A. Online Survey

Course Transfer Survey

- 1 Did you take any community college courses before enrolling at your *current* four-year institution?

YES

NO

- 2 Which community college did you attend before enrolling at your current four-year institution? (If more than one, choose the most *recent*).

- ☐ Clinton Community College
 - ☐ Des Moines Area Community College
 - ☐ Eastern Iowa Community College
 - ☐ Ellsworth Community College
 - ☐ Hawkeye Community College
 - ☐ Indian Hills Community College
 - ☐ Iowa Central Community College
 - ☐ Iowa Lakes Community College
 - ☐ Iowa Valley Community College
 - ☐ Iowa Western Community College
 - ☐ Kirkwood Community College
 - ☐ Marshalltown Community College
 - ☐ Muscatine Community College
 - ☐ Northeast Iowa Community College
 - ☐ North Iowa Community College
 - ☐ Northwest Iowa Community College
 - ☐ Scott Community College
 - ☐ Southeastern Community College
 - ☐ Southwestern Community College
 - ☐ Western Iowa Tech Community College
 - ☐ Other. Please specify.
-

3 How many course credits did you complete at a community college before attending your current institution?

- ☐ Less than 15 credit hours
- ☐ 16— 30 credit hours
- ☐ 31— 60 credit hours
- ☐ More than 60 credit hours

4 What was your *primary* area of study at the community college?

5 Indicate any degrees you received before transferring to your current four-year institution. *Select all that apply.*

- ☐ Associate of Arts (AA)
- ☐ Associate of Science (AS)
- ☐ Associate of General Studies (AGS)
- ☐ Associate of Applied Science (AAS)
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Ph.D
- ☐ Did not receive a degree
- ☐ Other. Please specify.

6 What was your status when you **first transferred** from a community college to your current four-year institution?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Graduate student
- ☐ Other. Please specify.

7 How many course credits have you completed at your current four-year institution?

- ☐ Less than 15 credit hours
- ☐ 16— 30 credit hours
- ☐ 31— 60 credit hours
- ☐ More than 60 credit hours

8 Are you currently attending the main campus or a university center at your current four-year institution?

- ☐ Main campus
- ☐ University center
- ☐ Other. Please specify.

-
- 9 Are you currently participating in a 2-plus-2 program at your institution? (This is a program between your community college and your four-year institution).

- ☐ Yes
- ☐ No
- ☐ Not Sure
- ☐ Other. Please specify.

Transfer Planning

- 10 When did you initially seek information about transferring from a community college to your *current four-year institution*?

- ☐ Before enrolling in a community college
- ☐ During my first year at a community college
- ☐ During my second year at a community college
- ☐ During my third year or any later year at a community college
- ☐ After completing my community college degree
- ☐ After leaving the community college without a degree
- ☐ Other. Please specify.

-
- 11 When did you initially seek information about transferring from a community college to your *current teacher education program*?

- ☐ Before enrolling in a community college
- ☐ During my first year at a community college
- ☐ During my second year at a community college
- ☐ During my third year or any later year at a community college
- ☐ After completing my community college degree
- ☐ After leaving the community college without a degree
- ☐ After enrolling at a four-year institution
- ☐ Other. Please specify.

Transferring General Education Courses

The following questions focus on your experience in transferring community college courses to meet **general education** course requirements at your current institution.

- 12 While attending a community college, did you *enroll in* courses that you thought would meet the **general education** course requirements at your current institution?

☐ YES ☐ NO

- 13 Did you *attempt to transfer* any of your community college courses to meet the **general education** course requirements at your current institution?

☐ YES ☐ NO

- 14 Did your current institution *count* any of your community college courses toward its **general education** course requirements?

☐ YES ☐ NO

- 15 How would you describe the process of *transferring* community college courses to meet the **general education** course requirements at your current institution?

Easy	Somewhat Easy	Somewhat Difficult	Difficult	Not Applicable
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

- 16 Did your current institution count your *community college degree* as credit toward its **general education** course requirements?

☐ Yes
☐ No
☐ Not applicable

Course Transfer Survey

17 Was the number of community college courses that your current institution accepted for its **general education** course requirements:

- ☐ More than you expected
 - ☐ The same as you expected
 - ☐ Less than you expected
 - ☐ Not applicable
-

18 Did you experience any of the following situations in transferring community college courses to meet **general education** requirements? *Select all that apply.*

- ☐ I retook one or more community college courses to meet a general education requirement at my current institution.
 - ☐ I took more community college courses than I originally anticipated to meet general education requirements at my current institution.
 - ☐ I took remediation classes to meet a general education requirement at my current institution.
 - ☐ I took an exam (e.g., CLEP, AP, or departmental) to meet a general education course requirement at my current institution.
-

19 Describe any other challenges you faced in transferring your community college courses to meet **general education** requirements.

Transferring Teacher Education Courses

The following questions focus on your experience in transferring community college courses to meet **teacher education** course requirements at your current institution.

- 20 While attending a community college did you *enroll in* courses that you thought would meet the **teacher education** course requirements at your current institution?

YES

NO

-
- 21 Did you *attempt to transfer* any of your community college courses to meet the **teacher education** course requirements at your current institution?

YES

NO

-
- 22 Did your current institution *count* any of your community college courses to meet its **teacher education** course requirements?

YES

NO

-
- 23 How would you describe the process of *transferring* community college courses to meet **teacher education** course requirements at your current institution?

Easy

Somewhat Easy

Somewhat Difficult

Difficult

Not Applicable

1

2

3

4

5

24 Was the number of community college courses that your current

institution accepted for its **teacher education** course requirements:

- ☐ More than you expected
- ☐ The same as you expected
- ☐ Less than you expected
- ☐ Not applicable

25 Did you experience any of the following situations in transferring community college courses to meet **general education** requirements? *Select all that apply.*

- ☐ I retook one or more community college courses to meet a teacher education course requirement at my current institution.
- ☐ I took more community college courses than I originally anticipated to meet a teacher education course requirement at my current institution.
- ☐ I took one or more community college courses to fulfill a teacher education course requirement, but my current institution did *not* accept the courses.
- ☐ I participated in a teaching field experience at my community college, but the field experience did not transfer to my current institution.

26 Describe any other challenges you faced in transferring community college courses to meet **teacher education** requirements of your current institution.

- 27** The following is a list of resources you may have used in transferring community college courses to your current institution. Indicate the degree to which these resources were useful in helping you transfer your community college courses.

	1 Very Useful	2 Useful	3 Somewhat Useful	4 Not Useful	5 Did not use the resource
Community college advisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transfer plan from the community college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transfer plan from your current university or teacher education program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transfer evaluation from your current university or teacher education program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advisor or staff person from your current university or teacher education program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course equivalency guide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online transfer tool (e.g., Transfer Plan-It)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Degree audit from your current university or teacher education program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Articulation agreement between the community college and four-year university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website for your current university or teacher education program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School teacher or teacher educator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-
- 28 Describe any other resources you used in transferring community college courses to your current institution.

Admissions Process

We are also interested in understanding your experience with the admissions process for your current institution.

-
- 29 How would you describe the admissions process for your current four-year institution?

Easy	Somewhat Easy	Somewhat Difficult	Difficult
1	2	3	4

-
- 30 Your teacher education program required an admissions process separate from your four-year institution's admissions process. How would you describe the admissions process for your current teacher education program?

Easy	Somewhat Easy	Somewhat Difficult	Difficult
1	2	3	4

- 31** The following is a list of resources you may have used to help with the admissions process at your current institution. Indicate the degree to which these resources were useful in helping with transferring your community college courses.

1 Very Useful	2 Useful	3 Somewhat Useful	4 Not Useful	5 Did not use the resource
Community college advisor				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transfer fair at the community college				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructor or faculty member at the community college				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Admissions counselor or advisor at your current four-year institution or teacher education program				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructor or faculty member at your current four-year institution or teacher education program				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website of your current four-year institution or teacher education program				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brochures or printed materials from your current four-year institution or teacher education program				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open house for community college transfer students at your current four-year institution or teacher education program				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual or group visit to your current four-year institution or teacher education program				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School teacher or other educator				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 32 Describe any other resources you used to complete the admissions process for your current four-year institution and teacher education program.

- 33 The following is a list of admissions requirements for your *four-year institution*. Rate the degree of ease or difficulty in meeting each requirement.

1 Very Easy	2 Somewhat Easy	3 Somewhat Difficult	4 Very Difficult	5 I did not have to meet the requirement
Grade Point Average (GPA) requirement				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Admission exams (e.g., C-BASE, etc.)				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General education requirements				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Admissions interview				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 34 The following is a list of admissions requirements for your *teacher education program*. Rate the degree of ease or difficulty in meeting each requirement.

1 Very Easy	2 Somewhat Easy	3 Somewhat Difficult	4 Very Difficult	5 I did not have to meet this requirement
Grade Point Average (GPA) requirement				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic skills exam (e.g., PPST, Praxis I)				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collegiate Assessment of Academic Proficiency (CAAP)				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher education course requirements				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching field experience				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 35 Describe any other aspects of the admissions process that you found challenging.

Background Information

36 Indicate your gender.

- ☐ Male
 - ☐ Female
-

37 Indicate your ethnicity.

- ☐ White
 - ☐ Black/African American
 - ☐ Hispanic
 - ☐ American Indian/Alaskan Native
 - ☐ Asian
 - ☐ Native Hawaiian/Pacific Islander
 - ☐ Other. Please specify.
-

38 Indicate your age.

- ☐ Younger than 18 years
- ☐ 18—24
- ☐ 25—29

- ☐ 30—34
- ☐ 35—39
- ☐ 40—44
- ☐ 45—49
- ☐ 50 years or older

Appendix B.

Telephone Interview Protocol

Background

1. What is your role at the community college? How long have you been in your role?
2. In a typical semester/quarter, how many students do you assist who are interested in transferring to a four-year university? How many of these transfer students are specifically interested in transferring into a teacher education program?
 - *Probe:* What teacher education programs do your students typically transfer to?
 - *Probe:* In a typical semester/quarter, what proportion of students interested in transferring to a teacher education program successfully make the transition?

Transfer Courses and Agreements

3. What types of courses does your community college offer for students who are interested in transferring to a teacher education program? Does your community college offer general education and teacher education courses?
 - *Probe:* Do you have a separate track or program for students interested in becoming a teacher? If so, what is the name of this track or program? What is its goal/purpose? When students in this track or program transfer to a teacher education program, what is their status in the teacher education program?
4. Does your community college have any formal or informal course transfer agreements with teacher education programs at four-year institutions? If so...
 - *Probe:* Approximately how many four-year institutions does the community college have agreements with?
 - *Probe:* Do the agreements allow students to transfer (a) individual courses, (b) a block of courses, (c) a community college degree, (d) or something else? Which approach is more common?
 - *Probe:* Are these agreements formal, written documents? Or are they informal verbal commitments from staff at the four-year institutions?
5. How often do you communicate with advisors/counselors who work with community college transfer students at teacher education programs at four-year institutions?
 - *Probe:* What is the purpose of your communication?

Transfer Process

6. At what point do students typically begin planning their transfer to a teacher education program? Why?
 - *Probe:* At what point *should* a student begin planning their transfer to a teacher education program? Why?

- *Probe:* What factors affect when a student begins planning their transfer to a teacher education program?
7. How do students enrolled at your community college *identify courses* that will transfer to a teacher education program at a four-year institution?
 - *Probe:* What **resources** are available to assist students in identifying the courses they need to take to transfer to a teacher education program? Which resources are used most often? Why?
 - *Probe:* What are the **challenges** students face in identifying courses they need to take to transfer to a teacher education program? Which challenges are most common? How could these challenges be addressed?
 - *Probe:* Are there differences in the resources and challenges, based on whether students are identifying general education or teacher education courses?
 8. When students make the transition to a teacher education program, how do they *transfer their community college courses* to the teacher education program?
 - *Probe:* What **resources** are available to assist students in transferring their community college courses to a teacher education program? Which resources are used most often? Why?
 - *Probe:* What **challenges** do students face in transferring their community college courses to a teacher education program? How could these challenges be addressed?
 - *Probe:* Are there differences in the resources and challenges, based on whether students are transferring general education or teacher education courses?
 9. What aspects of the admissions process for a teacher education program, besides transferring courses, present a challenge for students? Why?
 - *Probe:* Describe any challenges related to (a) meeting the minimum GPA requirement, (b) preparing for or taking an admissions exams, (c) preparing for or taking a Basic Skills exam (Praxis or CAAP), or (d) other admissions requirements?
 - *Probe:* Are challenges in the admission process different for the four-year institution and the teacher education program? If so, how?
 - *Probe:* What resources are available to assist students in completing these other aspects of the admissions process?

Lessons Learned

10. From your perspective, what are the three main challenges for students who transfer from a community college to a teacher education program? Why?
 - *Probe:* What can be done to address these challenges?
11. From your perspective, what are the three main resources or supports that are critical for students who transfer from a community college to a teacher education program?
 - *Probe:* Why are these resources important?
 - *Probe:* What can be done to make them more available?

12. In your opinion, are there certain types of students who face more barriers to transferring into a teacher education program?
 - *Probe:* If so, what types of students and why?
13. Are there any other lessons you have learned about the transfer process that we have not discussed? Is there anything else you would like to share about the transfer process?